

ABSTRACT OF THE DISCLOSURE

A semiconductor laser stack apparatus 1 comprises three semiconductor lasers 2a to 2c, two copper plates 3a and 3b, two lead plates 4a and 4b, a supply tube 5, a discharge tube 6, four insulating members 7a to 7d, and three heat sinks 10a to 10c. Here, the heat sink 10a to 10c is formed by a lower planar member 12 having an upper face formed with a supply water path groove portion 22, an intermediate planar member 14 formed with a plurality of water guiding holes 38, and an upper planar member 16 having a lower face formed with a discharge water path groove portion 30 which are successively stacked one upon another, whereas their contact surfaces are joined together.